

**Claims**

1. Method for determining the effects of a fancy yarn by measuring the yarn diameter, wherein the yarn sections between the effect areas are referred to as webs, characterised in that the effect area is determined in that the beginning of the effect is defined by meeting a first criterion and the end of the effect is defined by meeting a second criterion, in that a specifiable number of the largest diameters is determined between the beginning and end of the effect, in that an average is formed from the diameters determined, which is specified as the diameter of the effect, and in that the effect length is determined from the beginning and end of the effect.
2. Method according to claim 1, characterised in that the web diameter  $D_{ST}$  is determined, in order to determine the relative effect thickness.
3. Method according to claim 1 or 2, characterised in that to determine the web diameter  $D_{ST}$ , an arithmetic average of the yarn diameter is initially formed from a predetermined length of yarn as the reference diameter, in that the reference diameter is subtracted from the individual values of the yarn diameter, and in that the web diameter  $D_{ST}$  is then formed as the arithmetic average from all negative values, which were measured adjacent to other negative values.
4. Method according to any one of claims 1, 2 or 3, characterised in that the diameter  $D_E$  of the effect is formed as an average from the four largest diameters between the beginning and end of the effect.

5. Method according to any one of claims 1 to 4, characterised in that the exceeding of a limit diameter  $D_{GR}$  applies as the first criterion, which diameter is greater by a defined amount than the web diameter  $D_{ST}$  and in that the exceeding lasts over a predetermined yarn length  $L_{v1}$  and in that the falling below of the limit diameter  $D_{GR}$  applies as the second criterion and the falling below lasts over a predetermined yarn length  $L_{v2}$ .

6. Method according to claim 5, characterised in that the limit diameter  $D_{GR}$  is 15% greater than the web diameter  $D_{ST}$ .

7. Method according to claim 5 or 6, characterised in that the predetermined yarn length is then taken to be reached when the criterion is met over six consecutive measured values.

8. Method according to any one of claims 1 to 7, characterised in that a measured value is detected every two millimetres when measuring the yarn diameter.

9. Method according to any one of claims 1 to 8, characterised in that the variation in the diameter is determined on the effect length.